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IP DEPARTMENT  
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EXAMINER
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NGUYEN, SON T

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1,5-7,12,32-34** are rejected under 35 U.S.C. 102(b) as being anticipated by Rampton (WO 95/03371 on form PTO-1449).

For claim 1, Rampton discloses a method for production of organic plant growth media from sawmill waste, the process comprising the steps of introducing comminuted sawmill waste comprising particulate pine bark having a layer of exogenous bark adhering to endogenous bark (Rampton's bark waste is pine (see page 4, lines 1-6), and on page 7, Rampton stated that when they reach separation vessel 19, this is when the bark particles separate wherein the exogenous bark separates from the endogenous bark, hence, this indicate that the exogenous and endogenous has been adhered together until this point in the vessel 19) into an inlet (region around 11 of Fig. 2) of a conveyor mechanism 23 containing a body of heated water (page 6, lines 14-16) including a chemical treatment of pH modifier ("aqueous limestone suspension" of page 6 5th para.); submerging the sawmill waste in the body of the heated water for a predetermined period of time to kill microbes, insects, etc. (page 2, lines 13-15, page 6, lines 19-32, especially lines 28-32, wherein the conveyor 23 serves to continuously agitate the bark particles to ensure complete and even chemical treatment in the vessel

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12) whilst transporting treated sawmill waste towards an outlet of said conveyor mechanism (submerging and transporting occur simultaneously in vessel 12) wherein at least partial separation between said endogenous bark and said exogenous bark is effected by the application to said sawmill waste by said conveyor system of mechanical shear forces whilst said sawmill waste is submerged (page 6, lines 33-37 and page 7, lines 1-5, some endogenous and exogenous barks will be separated and sink to the bottom of vessel 12 by action of conveyor 23, rotating cranks 24, link arms 25, bed 26, which are all considered mechanical shear forces agitating the bark particles in the vessel 12); and, at least partially dewatering the waste to a predetermined moisture content (page 7, 4th complete para.). Note also that on page 6, Rampton explains that the conveyor 23 only momentarily elevates a layer of the bark above the water (as in floating it).

For claim 5, Rampton further disclose the exogenous and endogenous bark being partially separated during or subsequent the at least partial dewatering (from "shredder 31" of Fig. 2 and page 7 lines 36-37 of Rampton).

For claims 6 and 7, Rampton further discloses the water heated in the range of 85 to 125°C or 100 to 110°C ("at or near 100°C" of Rampton page 6, 4th para.).

For claim 12, Rampton as modified by Lebo further disclose the dewatering by mechanical pressure, rotary watering apparatus ("rotary screen dryer 31" of Fig. 2 and page 8, lines 3-6).

For claim 32, Rampton further discloses the waste at least partially dewatered adjacent an outlet port (31 of Fig. 2).

For claims 33-34, Rampton further discloses the dewatering by mechanical pressure, rotary watering apparatus ("rotary screen dryer 31" of Fig. 2 and page 8, lines 3-6).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rampton as applied to claim 1 above, and further in view of Lebo (3960718).

For claim 2, the limitations of claim 2 are disclosed as described above. Not disclosed is the sawmill waste mixed with up to 20% sewage. Lebo, however, discloses a mixture of sawmill waste ("wood shavings, sawdust, ground bark, wood chips or other such material" of col. 1 lines 53-60) with sewage sludge (col. 1 lines 53-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method Rampton by adding sewage sludge as disclosed by Lebo so as to make the material useable as a soil conditioner (see Lebo at col. 1 lines 53-60) and to make the amount of mixed with up to 20% sludge depending upon use of the medium.

5. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rampton (as above).

The limitations of claim 1 are disclosed as described above. Rampton further discloses the particles sized at 6 to 30 mm before introduction into the conveyor system

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(at page 4, lines 1-6 and page 6, line 4 "graded"). Not disclosed is the waste passing through a 12 mm screen. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method Rampton by having the waste passing through a 12 mm screen in order to assure that the material is uniform in size.

### ***Response to Arguments***

6. Applicant's arguments filed 9/16/08 have been fully considered but they are not persuasive.

*Applicant argued that nowhere within the four corners of the Rampton reference is there a disclosure or even a suggestion of submerging sawmill waste comprising exogenous bark to which endogenous bark is adhered in a body of heated water for a predetermined period of time while at the same time transporting treated sawmill waste toward an outlet of a conveyor mechanism.*

Page 2, lines 13-15, clearly states immersing the bark, which comes from the sawmill waste as explained by Rampton on page 4. In fig. 2 embodiment, the bark is immersed in the heated water therein. Immersing is synonymous to submerging. It is true that some of the bark particles float on the surface of the water as stated on page 6, lines 17-20, as the bark is being conveyed. However, if one reads on, the floating is only momentarily elevated (or floated) by the walking beam conveyor 23. In addition, the conveyor 23 also serves to agitate the bark in the vessel, thus, some bark particles during agitation will be submerged or immersed in the water. Moreover, page 6, lines 35-37, and page 7, lines 1-2, clearly state that the sapwood, exogenous bark and endogenous bark sink to the bottom of the vessel as the conveyors 23-25 move the

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bark through vessel 12. Again, some bark particles might float probably due to their lightness because of the pulverizing process not being consistent to produce particles of all same size and weight; but, nevertheless, some bark particles are submerged in the water. Furthermore, as clearly shown in fig. 2, the bark particles perhaps initially float on the surface but, as explained on page 6, lines 35-37, and page 7, lines 1-3, as they progress along the surface, the endogenous and exogenous barks are separated and sink to the bottom of the vessel and conveyed through conveyors (see arrow pointing direction of movement of barks), hence, sinking will submerge the barks. If it is true that the barks only float in the vessel 12 as alleged by Applicant, then it would not make sense to include members 16, 17, 18 and arrow direction of movement in vessel 12 as shown in fig. 12. What would be the purpose of having these members then? Obviously, the barks are submerged and guided by the conveyor system and then moved into vessel 19 as shown in fig. 2. See also previous response to argument in the final rejection mailed on 3/17/08.

As for Applicant's underlined comment of "predetermined period of time", since this is broad and not associated with any numeral value, Rampton's barks do go through the submerge process for a some sort of predetermined period of time because if not, the barks could be soaked too long and hence, might damage them. In addition, in such an automated system as Rampton, there has to be some sort of set time as the barks go through different station such as soaking in vessel 12 to separation vessel 19. If not, the barks will be in each vessel for infinite period of time since it is not predetermined which cannot happen.

*Applicant argued that the combination of Rampton and Lebo, taken as a whole, does not teach or suggest all the elements of claim 2 (which depends from claim 1). Nor are there any teachings or suggestions in the cited references that would motivate one of skill in the art to modify their disclosures to arrive at Applicants' method for production of organic plant growth media from sawmill waste, wherein the sawmill waste includes sewage sludge. Therefore, Applicants submit that a prima facie case of obviousness under 35 US. § 103(a) has not been established, and that claim 2 is non-obvious over the prior art relied upon by the Examiner.*

Clearly from the above rejection, the Examiner has provided motivation to combine the references. As stated, the reason one would want to include the sewage sludge of Lebo in the growth media of Rampton is for soil condition and as plant nutrient. This is clearly taught in Lebo, column 1, lines 53-60, hence, the Examiner has established a prima facie case of obviousness as required under 35 US. § 103(a). As for the up to 20% of sewage sludge use, clearly this percentage would depend on the use of the medium for the desired plant because some plants might not be able to tolerate too much nutrient. Again, the Examiner has established a prima facie case of obviousness as required under 35 US. § 103(a).

*Applicant argued that the Examiner's rationale for rejecting claim 8 under 35 USC § 103(a) is that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Rampton by having the waste pass through a 12 mm screen in order to assure that the material is uniform size. Nor are there any teachings or suggestions in the Rampton reference that would motivate one of skill in*



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*the art to modify its disclosure to arrive at Applicants' method for production of organic plant growth media from sawmill waste, wherein the sawmill waste passes through a 12 mm screen before introduction into the conveyor system. Therefore, Applicants submit that a prima facie case of obviousness under 35 US. § 103(a) has not been established, and that claim 8 is non-obvious over the prior art relied upon by the Examiner.*

Clearly from the above rejection, the Examiner has provided motivation to combine the references. As stated, the reason one would want to include a 12 mm screen in Rampton is he teaches particles sized at 6 to 30 mm, so 12 mm is in this range. Thus, if one wishes to employ a 12 mm particle size, then obviously, one has to use a 12 mm screen in order to assure that the material is of uniform in size.

### **Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). Note that even though Applicant filed an RCE, the claims have not been amended, thus, finality is proper.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is 571-272-6889. The examiner can normally be reached on Mon-Thu from 10:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son T. Nguyen/  
Primary Examiner, Art Unit 3643